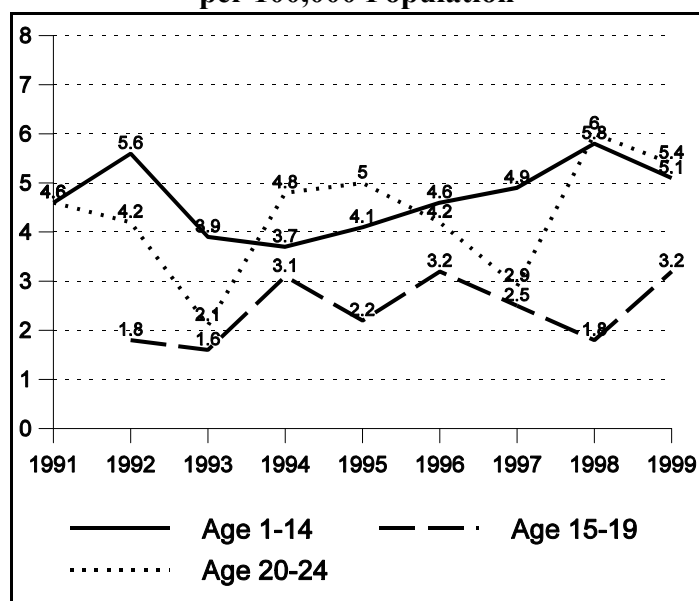


Dental

This report focuses on inpatient hospital admissions for dental conditions such as poor hygiene, cavities, gingivitis, or lack of fluoride. Not included in the measure are hospitalizations which relate to cranial facial disease, injury, cancer, or birth defects.¹

In 1999, there were a total of 81 inpatient hospital admissions for ages 1-24 with a principle diagnosis code indicating dental disease. These hospitalizations totaled 298 patient days. Figure 1 shows the hospital admission rates for dental conditions for children ages 1-14, adolescents age 15-19 and young adults age 20-24.

Figure 1. Admission Rates for Dental Conditions per 100,000 Population



In the following sections, hospital utilization statistics related to dental conditions are presented separately for children age 1-14, adolescents age 15-19 and young adults age 20-24.

¹Principle ICD codes used to identify dental disease included the following: 520.3, mottled teeth; 520.4, disturbances of tooth formation; 520.7, teething syndrome; 521.0, dental caries; 521.1, excessive attrition; 521.2 abrasion; 521.3, erosion; 521.4 pathological resorption; 521.5, hypercementosis; 521.6, ankylosis of teeth; 521.7, post eruptive color changes; 522.0, pulpitis; 522.1 necrosis of the pulp; 522.2, pulp degeneration; 522.3, abnormal hard tissue formation in pulp; 522.4, acute apical periodontitis of pulpal origin; 522.5, periapical abscess without sinus; 522.6, chronic apical periodontitis; 522.7, periapical abscess with sinus; 522.8, radicular cyst; 523, gingival and periodontal diseases; 525.0, exfoliation of teeth due to systemic causes; 528.0, stomatitis; 528.1, cancerum oris; 528.2 oral aphthae; 528.3, cellulitis and abscess; 528.4, cysts; 528.5, diseases of lips; 528.6, leukoplakia of oral mucosa, including tongue; 528.7, other disturbances of oral epithelium, including tongue; 529, diseases and other conditions of the tongue.

3 Hospitalizations for Dental Conditions Age 1-14

In 1999 there were 52 hospital admissions for children age 1-14 for dental conditions, representing a rate of **5.1 admissions per 100,000 children** (see Figure 2). No deaths were associated with dental hospitalizations.

Children age 1-14 spent a total of 187 days in the hospital in 1999 for dental conditions, representing a rate of **18.3 days per 100,000 children** (see Figure 3). The average length of stay for these hospitalizations was 3.6 days.

Figure 2. Hospital Admissions for Dental Conditions per 100,000 Children Age 1-14

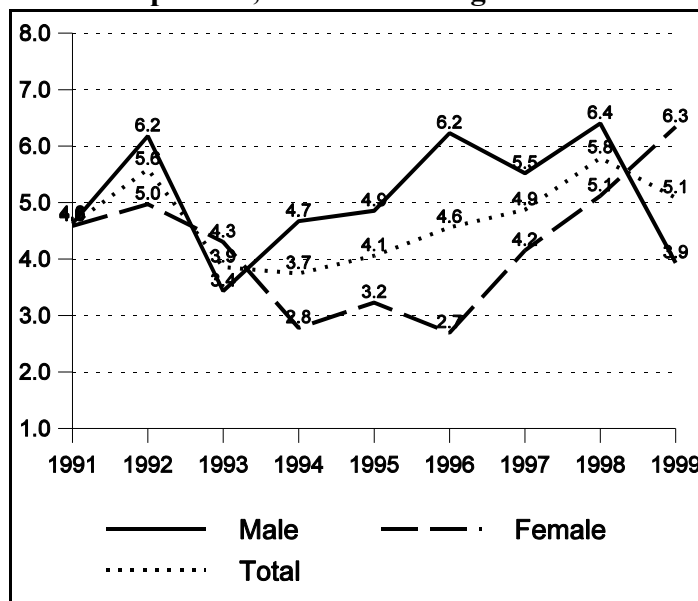


Figure 3. Hospital Days for Dental Conditions per 100,000 Children Age 1-14

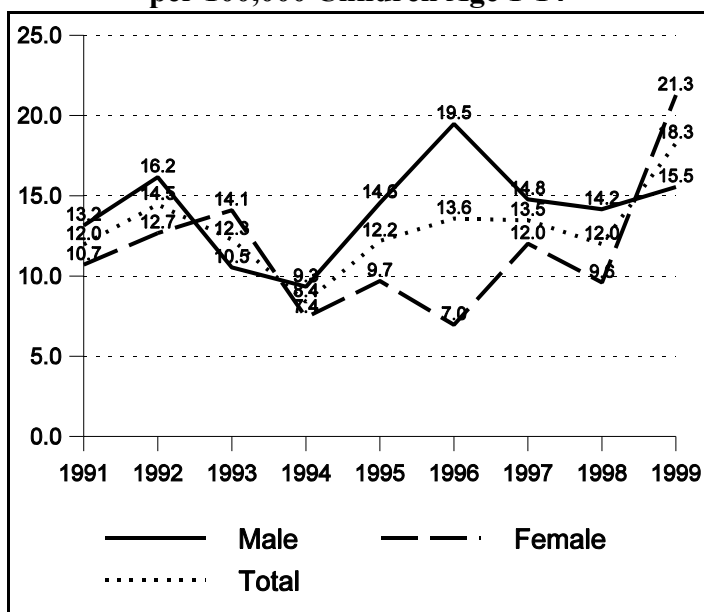


Table A on the following page profiles hospital utilization for dental conditions for children age 1-14 from 1991 through 1999.

Table A. Hospitalizations for Dental Conditions Age 1-14									
Admissions	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	19	26	15	21	22	31	28	33	21
Female	18	20	18	12	14	12	19	24	31
Total	37	46	33	33	36	43	47	57	52
Admission Rate per 100,000 Population	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	4.6	6.2	3.4	4.7	4.9	6.2	5.5	6.4	3.9
Female	4.6	5.0	4.3	2.8	3.2	2.7	4.2	5.1	6.3
Total	4.6	5.6	3.9	3.7	4.1	4.6	4.9	5.8	5.1
Hospital Days	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	54	68	46	42	66	97	75	73	83
Female	42	51	59	32	42	31	55	45	104
Total	96	119	105	74	108	128	130	118	187
Hospital Days per 100,000 Population	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	13.2	16.2	10.5	9.3	14.6	19.5	14.8	14.2	15.5
Female	10.7	12.7	14.1	7.4	9.7	7.0	12.0	9.6	21.3
Total	12.0	14.5	12.3	8.4	12.2	13.6	13.5	12.0	18.3
Average Length of Stay	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	2.8	2.6	3.1	2.0	3.0	3.1	2.7	2.2	4.0
Female	2.3	2.6	3.3	2.7	3.0	2.6	2.9	1.9	3.4
Total	2.6	2.6	3.2	2.2	3.0	3.0	2.8	2.1	3.6
Deaths	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total	0	0	0	0	0	0	0	0	0
Populations	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	410,250	420,655	436,647	449,740	453,056	497,710	507,309	515,473	533,870
Female	392,221	402,169	418,329	431,213	433,488	445,129	457,489	468,841	488,644
Total	802,471	822,824	854,976	880,953	886,544	942,839	964,798	984,314	1,022,514

When viewing hospital utilization related to race and ethnicity, it is important to understand that the Arizona Department of Health Services (ADHS) Hospital Discharge Data Base (which is the source of data for this analysis) does not contain Indian Health Services data. Hospitalizations for American Indians are only counted in this analysis if they received treatment in one of the hospitals reporting to ADHS. Consequently, American Indian rates are likely to be under-reported compared to other racial and ethnic groups in the analysis presented below.

Hospitalization rates for dental conditions for children age 1-14 in 1999 varied by race and ethnicity as shown in Figure 4. The rate of hospitalization for dental conditions is above the statewide average for White Hispanics and American Indians. Blacks have a rate of hospitalizations that is less than half the statewide average.

Table B below shows the actual number of hospital admissions for each racial/ethnic group, estimated population counts, and the rate of hospitalizations per 100,000 children age 1-14.

Figure 4. Hospitalization Rates for Dental Conditions for Children Age 1-14 by Racial and Ethnic Group

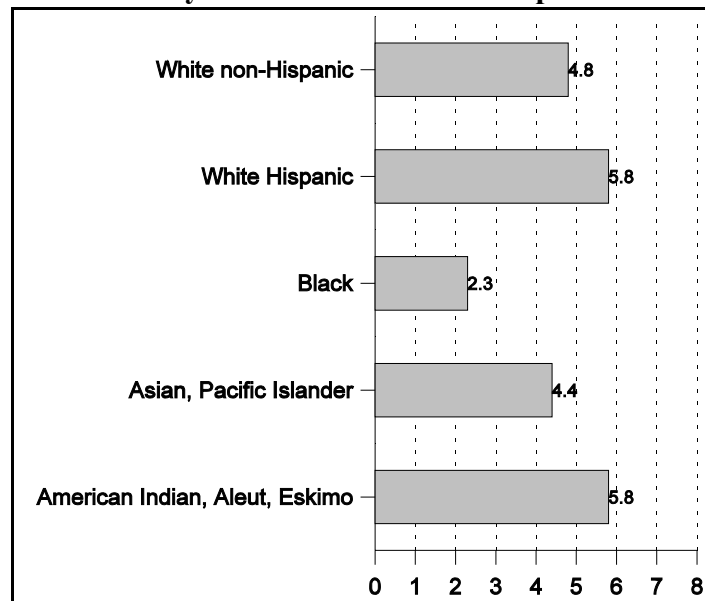


Table B. Hospitalizations for Dental Conditions per 100,000 Children Age 1-14 by Racial and Ethnic Group

Racial/Ethnic Group	Number of Hospitalizations	Population	Rate per 100,000
American Indian, Aleut, Eskimo	5	85,873	5.8
Asian, Pacific Islander	1	22,839	4.4
Black	1	43,734	2.3
White, Hispanic	18	311,954	5.8
White, non-Hispanic	27	558,115	4.8
Total	52	1,022,514	5.1

3 Hospitalizations for Dental Conditions Age 15-19

In 1999 there were 11 hospital admissions among adolescents age 15-19 for dental conditions, representing a rate of **3.2 admissions per 100,000** adolescents (see Figure 5).

Figure 5. Hospital Admissions for Dental Conditions per 100,000 Adolescents Age 15-19

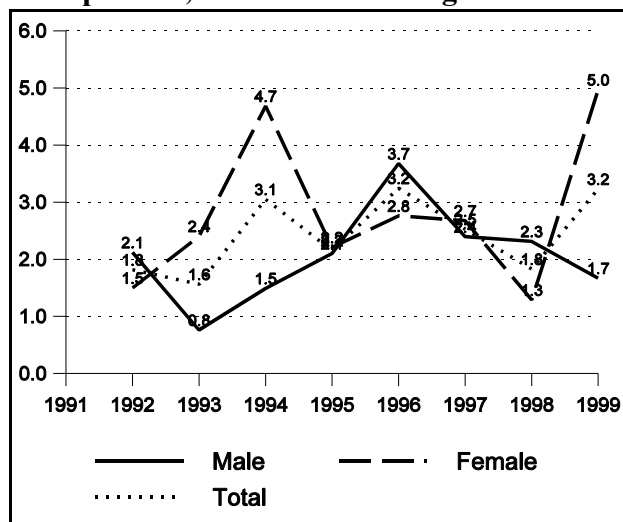
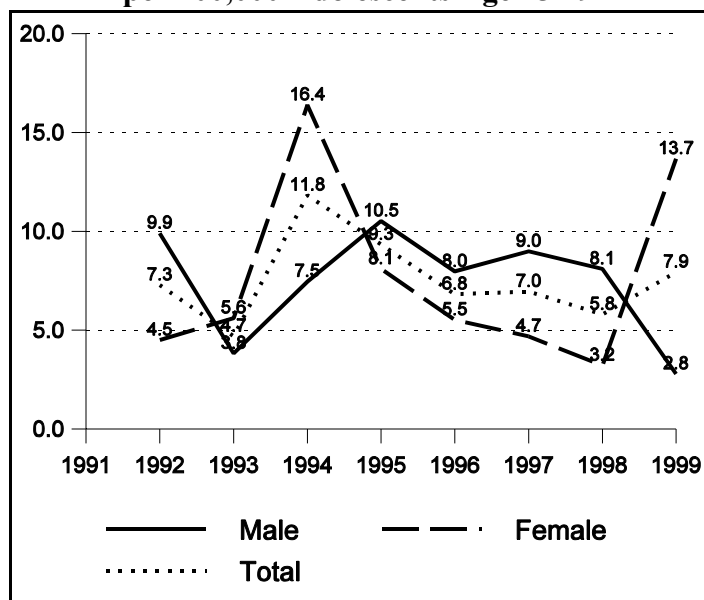


Figure 6. Hospital Days for Dental Conditions per 100,000 Adolescents Age 15-19



Adolescents spent a total of 27 days in the hospital for dental conditions in 1999, representing a rate of **7.9 days per 100,000** adolescents. The average length of stay for these hospitalizations was 2.5 days.

Table C on the following page profiles hospital utilization for dental conditions for adolescents age 15-19 from 1991 through 1999.

Table C. Hospitalizations for Dental Conditions Age 15-19									
Admissions	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	7	3	1	2	3	6	4	4	3
Female	3	2	3	6	3	4	4	2	8
Total	10	5	4	8	6	10	8	6	11
Admission Rate per 100,000 Population	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male		2.1	0.8	1.5	2.1	3.7	2.4	2.3	1.7
Female		1.5	2.4	4.7	2.2	2.8	2.7	1.3	5.0
Total		1.8	1.6	3.1	2.2	3.2	2.5	1.8	3.2
Hospital Days	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	19	14	5	10	15	13	15	14	5
Female	9	6	7	21	11	8	7	5	22
Total	28	20	12	31	26	21	22	19	27
Hospital Days Rate per 100,000 Population	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male		9.9	3.8	7.5	10.5	8.0	9.0	8.1	2.8
Female		4.5	5.6	16.4	8.1	5.5	4.7	3.2	13.7
Total		7.3	4.7	11.8	9.3	6.8	7.0	5.8	7.9
Average Length of Stay	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	2.7	4.7	5.0	5.0	5.0	2.2	3.8	3.5	1.7
Female	3.0	3.0	2.3	3.5	3.7	2.0	1.8	2.5	2.8
Total	2.8	4.0	3.0	3.9	4.3	2.1	2.8	3.2	2.5
Deaths	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total	0	0	0	0	0	0	0	0	0
Populations	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	NA	141,363	130,719	133,996	142,604	163,104	166,873	172,846	179,432
Female	NA	133,341	124,791	128,114	135,788	144,862	149,387	155,081	160,889
Total	NA	274,704	255,510	262,110	278,392	307,966	316,260	327,927	340,321

When viewing hospital utilization related to race and ethnicity, it is important to understand that the Arizona Department of Health Services (ADHS) Hospital Discharge Data Base (which is the source of data for this analysis) does not contain Indian Health Services data. Hospitalizations for American Indians are only counted in this analysis if they received treatment in one of the hospitals reporting to ADHS. Consequently, American Indian rates are likely to be under-reported compared to other racial and ethnic groups in the analysis presented below.

Population estimates are not available separately for the 15-19 and 20-24 age groups. Consequently, these data are combined to compare adolescent rates of hospitalizations for dental conditions. Hospitalization rates for adolescents age 15-24 in 1999 varied by race and ethnicity.

Table D below shows the actual number of hospital admissions for each racial/ethnic group, estimated population counts, and the rate of hospitalizations per 100,000 adolescents age 15-24. There are some hospitalizations for which the race/ethnicity could not be determined. These cases are shown as "Other/Unknown" under the number of hospitalizations with no corresponding population estimate or rate.

Table D. Hospitalizations for Dental Conditions per 100,000 Adolescents Age 15-24 by Racial and Ethnic Group			
Racial/Ethnic Group	Number of Hospitalizations	Population	Rate per 100,000
American Indian, Aleut, Eskimo	0	47,977	0.0
Asian, Pacific Islander	0	16,020	0.0
Black	2	28,604	7.0
White, Hispanic	10	186,577	5.4
White, non-Hispanic	15	393,674	3.8
Other/Unknown	2		
Total	29	672,852	4.3

3 Hospitalizations for Dental Conditions Age 20-24

In 1999 there were 18 hospital admissions among young adults age 20-24 for dental conditions, representing a rate of **5.4 admissions per 100,000** adolescents (see Figure 7).

Young adults spent a total of 84 days in the hospital for dental conditions in 1999, representing a rate of **25.3 days per 100,000** adolescents (see Figure 8). The average length of stay for these hospitalizations was 4.7 days.

Figure 7. Hospital Admissions for Dental Conditions per 100,000 Young Adults Age 20-24

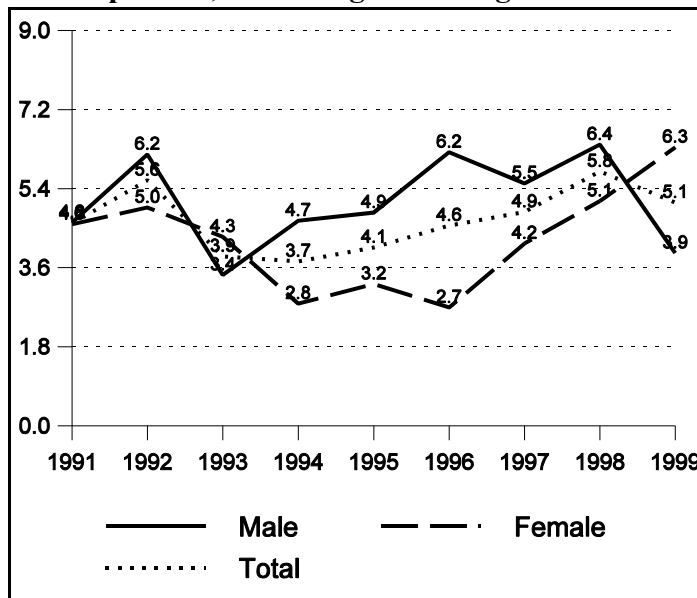


Figure 8. Hospital Days for Dental Conditions per 100,000 Young Adults Age 20-24

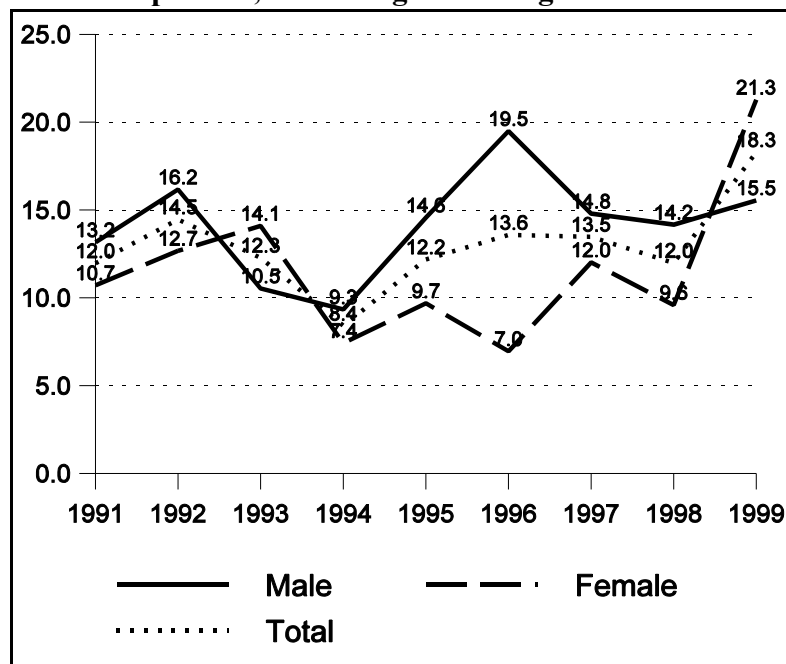


Table E on the following page profiles hospital utilization for dental conditions for young adults age 20-24 from 1991 through 1999.

Population estimates by race/ethnicity are not available separately for the 15-19 and 20-24 age groups. Consequently, these data are combined to compare adolescent rates of hospitalizations for dental conditions and were presented in the previous section on adolescents.

Table E. Hospitalizations for Dental Age 20-24									
Admissions	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	7	11	1	5	10	7	7	11	10
Female	6	1	5	9	5	6	2	8	8
Total	13	12	6	14	15	13	9	19	18
Admission Rate per 100,000 Population	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	4.7	7.4	0.7	3.3	6.4	4.4	4.2	6.6	5.7
Female	4.4	0.7	3.6	6.4	3.5	4.1	1.4	5.4	5.1
Total	4.6	4.2	2.1	4.8	5.0	4.2	2.9	6.0	5.4
Hospital Days	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	21	75	5	12	33	35	20	24	53
Female	30	5	13	36	24	14	9	20	31
Total	51	80	18	48	57	49	29	44	84
Hospital Days Rate per 100,000 Population	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	14.2	50.5	3.3	7.9	21.2	21.8	12.1	14.5	30.1
Female	22.0	3.6	9.4	25.7	16.7	9.6	6.1	13.5	19.8
Total	18.0	28.0	6.2	16.5	19.0	16.0	9.3	14.0	25.3
Average Length of Stay	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	3.0	6.8	5.0	2.4	3.3	5.0	2.9	2.2	5.3
Female	5.0	5.0	2.6	4.0	4.8	2.3	4.5	2.5	3.9
Total	3.9	6.7	3.0	3.4	3.8	3.8	3.2	2.3	4.7
Deaths	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total	0	0	0	0	0	0	0	0	0
Populations	1991	1992	1993	1994	1995	1996	1997	1998	1999
Male	147,456	148,627	149,921	151,560	155,811	160,281	164,938	165,751	176,089
Female	136,614	137,583	138,653	140,043	144,014	145,894	147,982	148,487	156,442
Total	284,070	286,210	288,574	291,603	299,825	306,175	312,920	314,238	332,531